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EXAMINER				
KANG, INSUN				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/808,501

**Applicant(s)**

BEAVEN ET AL.

**Examiner**

INSUN KANG

**Art Unit**

2193

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to the Notice of Appeal/AP.PRE.REQ. filed on 11/26/2007.

The previous action is withdrawn. The prosecution is reopened hereby.

2. Claims 1-49 are pending.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-17 and 34-49 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-17 are non-statutory because they are directed to a computer system that does not have physical structural elements. With no other structure in the independent claim to rely on, the alleged “computer system” of the claims turns out to be an abstract idea for being a computer program per se, and, thus, does not fit within the definition of the categories of patentable subject matter set forth in § 101. Therefore, the claims are non-statutory. It is recommended to replace a “computer system” with a “computer system having a processor.”

Claims 34-49 are non-statutory because they are directed to a “program product” on a computer readable medium that includes a transmission medium such as defined in the instant specification (i.e. page 17, lines 3-8). Such medium does not have a physical structure, rather it is the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism per se, and, thus, does not fit within the definition of the categories of patentable subject matter set forth in § 101. Therefore, the claims are non-statutory. It is recommended to replace a “computer readable medium” with a “computer-

storage medium” and to amend the specification to distinguish the difference between storage mediums and communication mediums.

The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 34-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Per claims 34-49, it is unclear whether these claims are dependent on claim 18.

Interpretation: dependent claims of claim 18.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-14, 17-30, 33-46, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Negri (US 2002/0059079).

Per claim 1:

Negri discloses:

- a component specification element that specifies components (i.e. “Defines the principal components in a service. These include the software services and related physical elements that combine to deliver the service,” 0048);
- a control flow specification element that specifies control flows (i.e. “The business process involves the flow of data and control through a complex arrangement of these components...eService management must understand this flow of data,” 0046; 0049, “the relationship graph defines the actual topology of the model. Components can depend on each other,” 0050)
- a data flow specification element that specifies data flows (i.e. “The business process involves the flow of data and control through a complex arrangement of these components...eService management must understand this flow of data,” 0046; 0049; “the relationship graph defines the actual topology of the model. Components can depend on each other,” 0050);
- a resource specification element that specifies resources (i.e. “Components can depend on each other...but they can also share common resources,” 0050, 0051, 0060, 0063);
- a quality of service specification derivation element, the quality of service specification derivation element (i.e. “deriving an e-service management strategy based on said business process specification...ensuring the service quality of said e-service,” claim 1; 0036; 0050; 0057; 0063) having for output an application model in combination with a quality of service specification derived by implication from relations between the components, the control flows, the data flows and the resources (i.e. “a service delivery model...to assure the customer experience at the point of service delivery,” 0063; “An eService model...Defines the principal

components in a service...Components are modeled by service delivery function...Process and responsibilities may be defined by function...Establishes implicit and explicit relationships...share common resources, exchange data with each other, collect common statistics, and work together in complex flows of control," 0047-0050; 0046);

Negri does not explicitly disclose that the quality of service specification (the service delivery model) is made available to a runtime engine for deployment as a runtime contract in a runtime processing environment. However, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to derive a runtime contract from the service delivery model (described at build time) at the point of service delivery (runtime) to enforce the service delivery specification in the model. The service delivery model in Negri would help "ensuring the quality of eService delivery (0023)" when deployed at runtime.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Negri discloses a runtime engine for deploying said runtime contract (i.e. "Service Level Agreements (SLA)," 0014; "a WebLogic BeX can be deployed at any site built upon BEA's WebLogic application server, 0058; claim 1; 0036; 0050; 0057; 0063) as claimed.

Per claim 3:

Negri does not explicitly disclose that said runtime contract comprises a messaging requirement contract. Negri discloses a service level agreement (SLA) that specify the levels of service

(0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a messaging requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 4:

Negri does not explicitly disclose that said runtime contract comprises a transactionality requirement contract. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a transactionality requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 5:

Negri does not explicitly disclose that said runtime contract comprises a security requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a security requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 6:

Negri does not explicitly disclose that said runtime contract comprises a recoverability requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a recoverability requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 7:

Negri does not explicitly disclose that said runtime contract comprises a completion requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a completion requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 8:

Negri does not explicitly disclose that said runtime contract comprises a completion requirement contract. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the



invention was made to modify Negri's disclosed system to include a completion requirement contract specifying transactional behavior in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 9:

Negri does not explicitly disclose that said runtime contract comprises a completion requirement contract specifying compensation behavior. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a completion requirement contract specifying compensation behavior in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 10:

Negri does not explicitly disclose that said runtime contract comprises at least one of a reliability, availability and serviceability requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include at least one of a reliability, availability and serviceability requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 11:

The rejection of claim 1 is incorporated, and further, Negri discloses a quality of delivery requirement contract (i.e. "Service Level Agreements (SLA)," 0014; "quality of eService delivery," 0023) as claimed.

Per claim 12:

Negri does not explicitly disclose that said runtime contract comprises at least one of a priority requirement and a response goal requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include at least one of a priority requirement and a response goal requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 13:

Negri does not explicitly disclose that said runtime contract comprises a performance requirement. Negri discloses a service level agreement (SLA) that specify the levels of service (0014) and a Service level management tool that measures service delivery (0036). Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Negri's disclosed system to include a performance requirement in the service delivery contract to help "ensuring the quality of eService delivery (0023)."

Per claim 14:

The rejection of claim 1 is incorporated, and further, Negri discloses the quality of service specification is stored in a repository (i.e. 0051).

Per claim 17:

The rejection of claim 1 is incorporated, and further, Negri discloses a quality of service specification is stored in a modeling language (i.e. "eService modeling," 0044) as claimed.

Per claims 18-30 and 33, they are the method versions of claims 1, 2, 4-14 and 17, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, 4-14 and 17 above.

Per claims 34-46 and 49, they are the computer program versions of claims 18-30 and 33, respectively and are rejected for the same reasons set forth in connection with the rejection of claims 18-30 and 33 above.

9. Claims 15, 16, 31, 32, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Negri (US 2002/0059079) in view of Koistinen et al. ("Quality of Service Aware Distributed Object Systems," 5/1999) hereinafter referred to as "Koistinen."

Per claim 16:

The rejection of claim 1 is incorporated, and further, Negri does not explicitly teach that the quality of service specification is stored in XML. However, Koistinen teaches that storing a

quality of service specification in a tagged markup language such as XML was known in the pertinent art, at the time applicant's invention was made, "so that it can be understood readily by humans and parsed easily (pg 9, Implementation section)" such as that disclosed in Koistinen. It would have been obvious for one skilled in the art of the pertinent art to modify Negri's disclosed system to use XML. The modification would be obvious because one skilled in the art would be motivated to provide readability and ease parsing as taught by Koistinen (pg 9, Implementation section).

Per claim 32, it is the method version of claim 16, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 16 above.

Per claim 48, it is the computer program version of claim 16, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 16 above.

Per claim 15, this claim is broader version of the claimed system discussed in claim 16 wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above. XML in claim 16 is a tagged markup language. Therefore, accordingly, see the rejection of claim 16 above.

Per claim 31, it is the method version of claim 15, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 15 above.

Per claim 47, it is the computer program version of claim 15, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 15 above.

10. Claims 1-14, 17-30, 33-46, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leymann et al. (US Paten 7,024,670) hereafter Leymann in view of Negri (US 2002/0059079).

Per claim 1:

Leymann discloses:

- a component specification element that specifies components (i.e. "components of a FlowMark process model," col. 5 lines 4-5);

- a control flow specification element that specifies control flows (i.e. "said graph define a potential control flow within said process-model," col. 3 lines 10-15)

- a data flow specification element that specifies data flows (i.e. "Connectors link activities in a process model...one defines the sequence of activities and the transmission of data between activities," col. 6 lines 25-29);

- a resource specification element that specifies resources (i.e. "A resource may be specified," col. 7 lines 20-24).

Leymann does not explicitly teach a quality of service specification derivation element, the quality of service specification derivation element having for output an application model in combination with a quality of service specification derived by implication from relations between the components, the control flows, the data flows and the resources. However, Negri teaches such a Qos model was known in the pertinent art, at the time applicant's invention was made, to ensure the quality of eService delivery of the process specification (0023). It would have been obvious for one having ordinary skill in the art to modify Leymann's disclosed workflow management system to derive a Qos on the process model as taught by Negri. The

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modification would be obvious because one having ordinary skill in the art would be motivated to “assure the customer experience at the point of service delivery (0063)” as suggested by Negri.

Leymann in view of Negri further discloses that the quality of service specification is made available to a runtime engine for deployment as a runtime contract in a runtime processing environment (“these buildtime definitions the process models are then converted into process templates for use by FlowMark at runtime,” col. 5 lines 1-5).

Per claim 2:

The rejection of claim 1 is incorporated, and further, Leymann discloses a runtime engine for deploying said runtime contract (“these buildtime definitions the process models are then converted into process templates for use by FlowMark at runtime,” col. 5 lines 1-5).

Per claim 3:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a messaging requirement contract. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a messaging requirement in the contract if desired.

Per claim 4:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a transactionality requirement contract. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a transactionality requirement in the contract if desired.

Per claim 5:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a security requirement contract. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a security requirement in the contract if desired.

Per claim 6:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a recoverability requirement contract. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a recoverability requirement in the contract if desired.

Per claim 7:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a completion requirement contract. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a completion requirement in the contract if desired.

Per claim 8:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a completion requirement contract specifying transactional behavior. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a completion requirement contract specifying transactional behavior in the contract if desired.

Per claim 9:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a completion requirement contract specifying compensation behavior. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a completion requirement contract specifying compensation behavior in the contract if desired.



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Per claim 10:

Leymann and Negri do not explicitly disclose that said runtime contract comprises at least one of a reliability, availability and serviceability requirement. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include at least one of a reliability, availability and serviceability requirement in the contract if desired.

Per claim 11:

The rejection of claim 1 is incorporated, and further, Negri further discloses a quality of delivery requirement contract (i.e. “Service Level Agreements (SLA),” 0014; “quality of eService delivery,” 0023) as claimed.

Per claim 12:

Leymann and Negri do not explicitly disclose that said runtime contract comprises at least one of a priority requirement and a response goal requirement. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include at least one of a priority requirement and a response goal requirement in the contract if desired.

Per claim 13:

Leymann and Negri do not explicitly disclose that said runtime contract comprises a performance requirement. Leymann discloses that a contract includes “all appropriate contracts (col. 9 lines 5-11).” Therefore, it would have been obvious for a person having ordinary skill in the pertinent art at the time the invention was made to modify Leymann and Negri’s disclosed system to include a performance requirement in the contract if desired.

Per claim 14:

The rejection of claim 1 is incorporated, and further, Negri further discloses the quality of service specification is stored in a repository (i.e. 0051).

Per claim 17:

The rejection of claim 1 is incorporated, and further, Negri discloses a quality of service specification is stored in a modeling language (i.e. “cService modeling,” 0044) as claimed.

Per claims 18-30 and 33, they are the method versions of claims 1, 2, 4-14 and 17, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, 4-14 and 17 above.

Per claims 34-46 and 49, they are the computer program versions of claims 18-30 and 33, respectively and are rejected for the same reasons set forth in connection with the rejection of claims 18-30 and 33 above.

11. Claims 15, 16, 31, 32, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leymann et al. (US Paten 7,024,670) hereafter Leymann, in view of Negri (US 2002/0059079), and further in view of Koistinen et al. ("Quality of Service Aware Distributed Object Systems," 5/1999) hereinafter referred to as "Koistinen."

Per claim 16:

The rejection of claim 1 is incorporated, and further, Leymann and Negri do not explicitly teach that the quality of service specification is stored in XML. However, Koistinen teaches that storing a quality of service specification in a tagged markup language such as XML was known in the pertinent art, at the time applicant's invention was made, "so that it can be understood readily by humans and parsed easily (pg 9, Implementation section)" such as that disclosed in Koistinen. It would have been obvious for one skilled in the art of the pertinent art to modify Leymann and Negri's disclosed system to use XML. The modification would be obvious because one skilled in the art would be motivated to provide readability and ease parsing as taught by Koistinen (pg 9, Implementation section).

Per claim 32, it is the method version of claim 16, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 16 above.

Per claim 48, it is the computer program version of claim 16, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 16 above.

Per claim 15, this claim is broader version of the claimed system discussed in claim 16 wherein all claim limitations also have been addressed and/or covered in cited areas as set forth

the above. XML in claim 16 is a tagged markup language. Therefore, accordingly, see the rejection of claim 16 above.

Per claim 31, it is the method version of claim 15, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 15 above.

Per claim 47, it is the computer program version of claim 15, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 15 above.

### ***Response to Arguments***

12. Applicant's arguments filed on 11/26/2007 have been fully considered but they are not persuasive.

The applicant states that Negri does not disclose defining a control flow specification element, a data flow specification element, a resource specification element, and/or a quality of service specification derivation element. Negri merely explains that components can share common resources (remark, page 4).

In response to the above statement, Negri discloses the business process involving the flow of data and control through a complex arrangement of these components (i.e. 0046) and the e-service management ensuring the service quality of the e-service (i.e. 0036). The eService model defines the principal components (0048), the data and control flow (see Fig. 3 dependency graph where dependencies among components are defined by data/control flow of the components; "The business process involves the flow of data and control through a complex arrangement of these components," 0046). Negri states that components can depend on each other but they can also share common resources (0050). One component can be specified as a

resource of another component and a shared common resource can be defined in a component. In either case, the resource (a component or a shared resource) is defined for each component.

The applicant states that Negri does not output both an application model and a quality of service specification. Negri does not appear to disclose outputting an application model in addition to the e-service management strategy (remark, 4).

Negri discloses a service delivery model with intelligent controls where the Qos is expressed with eService modeling (0063). The service delivery model is the combination of the model and Qos "to assure the customer experience at the point of service delivery (0063)."

For 101 rejection:

The applicant states that the various specification elements recited in Claim 1 can be embodied as a computer program product. Thus, Claim 1 is directed to a general-purpose computer system that is configured to perform the operations (remark, 2).

In response, a computer program product itself is not statutory as being a program. Such a program has to be stored on a computer-readable medium or a computer in order to create any functional interrelationship, either as part of the stored data or as part of the computing processes when performed by the computer ("acts"). The claims are directed to program elements without any physical components of the system. Therefore, the claimed computer system is considered as a computer software system (i.e. a program per se). Therefore, the claims are non-statutory.

This action is made non-final.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-F 8:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/  
Examiner, Art Unit 2193

/Lewis A. Bullock, Jr./  
Supervisory Patent Examiner, Art Unit 2193